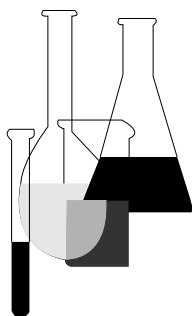




Product Properties Test Guidelines

OPPTS 830.7000

pH of Water Solutions or Suspensions



“Public Draft”

INTRODUCTION

This guideline is one of a series of test guidelines that have been developed by the Office of Prevention, Pesticides and Toxic Substances, United States Environmental Protection Agency for use in the testing of pesticides and toxic substances, and the development of test data that must be submitted to the Agency for review under Federal regulations.

The Office of Prevention, Pesticides and Toxic Substances (OPPTS) has developed this guideline through a process of harmonization that blended the testing guidance and requirements that existed in the Office of Pollution Prevention and Toxics (OPPT) and appeared in Title 40, Chapter I, Subchapter R of the Code of Federal Regulations (CFR), the Office of Pesticide Programs (OPP) which appeared in publications of the National Technical Information Service (NTIS) and the guidelines published by the Organization for Economic Cooperation and Development (OECD).

The purpose of harmonizing these guidelines into a single set of OPPTS guidelines is to minimize variations among the testing procedures that must be performed to meet the data requirements of the U. S. Environmental Protection Agency under the Toxic Substances Control Act (15 U.S.C. 2601) and the Federal Insecticide, Fungicide and Rodenticide Act (7 U.S.C. 136, *et seq.*).

Public Draft Access Information: This draft guideline is part of a series of related harmonized guidelines that need to be considered as a unit. *For copies:* These guidelines are available electronically from the EPA Public Access Gopher (gopher.epa.gov) under the heading “Environmental Test Methods and Guidelines” or in paper by contacting the OPP Public Docket at (703) 305-5805 or by e-mail: guidelines@epamail.epa.gov.

To Submit Comments: Interested persons are invited to submit comments. By mail: Public Docket and Freedom of Information Section, Office of Pesticide Programs, Field Operations Division (7506C), Environmental Protection Agency, 401 M St. SW., Washington, DC 20460. In person: bring to: Rm. 1132, Crystal Mall #2, 1921 Jefferson Davis Highway, Arlington, VA. Comments may also be submitted electronically by sending electronic mail (e-mail) to: guidelines@epamail.epa.gov.

Final Guideline Release: This document is available from the U.S. Government Printing Office, Washington, DC 20402 on *The Federal Bulletin Board*. By modem dial 202-512-1387, telnet: federal.bbs.gpo.gov 3001, or call 202-512-1530 for disks or paper copies. This guideline is available in ASCII and PDF (portable document format).

OPPTS 830.7000 pH of water solutions or suspensions.

(a) **Scope**—(1) **Applicability.** This guideline is intended to meet testing requirements of both the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 U.S.C. 136, *et seq.*) and the Toxic Substances Control Act (TSCA) (15 U.S.C. 2601).

(2) **Background.** The source materials used in developing this harmonized OPPT test guideline are under 40 CFR 796.1450 and OPP guideline 63–12.

(b) **Purpose.** This test guideline references methodology to develop data on the pH of aqueous solutions and suspensions of chemical substances and mixtures. The data may be used to calculate the degree of acidity or basicity of aqueous solutions or suspensions that will be formed by a chemical substance and to evaluate the resulting effects the substance will have on human health and the environment. The pH may be used in the design of other tests.

(c) **Test Procedures.** (1) The electrometric method is recommended for determining the pH of an aqueous solution or suspension. The recommended apparatus should consist of a pH meter and electrodes, meeting performance standards and specifications as described, for example, in ANSI/ASTM E 70–7700 and in ASTM D 1293–78 (see paragraph (d) of this guideline).

(2) It is recommended that the water used in preparing solutions or suspensions meet the standards for type I or type II reagent water specified by ANSI/ASTM D 1193–77 and be free of CO₂ (see paragraph (d) of this guideline). For chemical substances that are readily soluble in water, the test guideline recommends that a solution of 1 percent by mass be used. For chemical substances that are soluble in water to an extent of less than 1 percent by mass at 25 °C, an aqueous suspension of the chemical substance should be tested.

(3) The recommended test methods are available for purchase from the American Society for Testing and Materials, 1916 Race St., Philadelphia, PA 19103.

(d) **References.** The following references should be consulted for additional background material on this test guideline.

(1) American Society for Testing and Materials, “Annual Book of ASTM Standards,” ASTM, 1916 Race St., Philadelphia, PA, (latest edition).

(2) [Reserved]